

**DEPARTMENT OF TRANSPORTATION****DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch

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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.21**WELDING WITNESS REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WWR-000204**Date Inspected:** 07-May-2007**Project Name:** SAS Superstructure**OSM Arrival Time:** 800**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1730**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island**Location:** Shanghai, China**Witness:** **Procedure Qualification Record**  
**Welding** **NDT****Welder Qualification**  
**Mechanical Testing, describe:** Bend, CVN(weld and HAZ),  
Tensile and Macro Etch tests.**Index Lot #:** B49-021-07**Witness Lot #:** B71-023-07**Bridge No:** 34-0006**Component:** N/A**Welder:** Zhu Hai Ping**ID #:** N/A**Joint Description:** B-U2a

N/A

**WPS ID #:** PWPS-B-T-3214

N/A

**Base Metal:** A709 Grade HPS485W

N/A

**PQR ID #:** HP200778

N/A

**Thickness:** 25mm

N/A

**Process:** SMAW

N/A

**Electrode Spec/Class:** E9018M-H4R

N/A

**Positions:** 4G

N/A

**Backing Material:** A709 Grade HPS485W

N/A

**CWI:** Song Wei min

N/A

**Average Amps:**

N/A

**AWS Code:** AWS D1.5-2002

N/A

**Average Volts:**

N/A

**Applicable Sec:** Section 5, 5.13

N/A

**Travel Speed:**

N/A

**Heat Input:**

N/A

**Preheat:**

N/A

**Summary of Items Observed:**

The CALTRANS Quality Assurance (QA) Inspector, Alfredo Acuna was present for the mechanical testing on the welding qualification tests for the procedure qualification record (PQR) PQR 200778 scheduled for this project. The testing was at the ZPMC facility in Shanghai, China. The QA Inspector observed tensile test on reduced sections and all weld metal specimens along with side bends, Charpy Vee Notch (CVN) and macro etch tests. The test was performed per the AWS D1.5, Section 5.18 requirements and special provisions. The tests appeared to be in general compliance with the contract documents.

**Summary of Conversations:**

The QA inspector had a conversation with ZPMC QA representative Hu Gang. The QA inspector brought to Mr. Gang attention that ZPMC was using the CVN temperature of -30 °C in lieu of -18 °C in accordance with the special provisions for testing 5 coupons (HPS 485W) at the heat affected zone (HAZ). After, Mr. Gang confirmed with ZPMC technical department. Mr. Gang agreed that the CVN testing temperature needed to be changed to -18° C to determine the toughness of the HAZ from the 5 test coupons. ZPMC performed CVN testing with -18 °C.

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## WELDING WITNESS REPORT

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is in general conformance with the contract requirements.

**Observed welding,testing or results:**

is not in conformance with the contract requirements.

**Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Mazen Wahbeh, (818) 292-0659, who represents the Office of Structural Materials for your project.

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**Inspected By:** Acuna,Alfredo

Quality Assurance Inspector

**Reviewed By:** McClary,David

QA Reviewer

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